Amendments to the Claims

Please cancel claims 1-34 without prejudice, and add new claims 35-68, as follows:

Claims 1-34 (cancelled).

Claim 35 (new). Apparatus for providing optical radiation, comprising a pump source for providing pump radiation, and a brightness converter, and wherein the brightness converter is defined by a length, and contains a substantially rigid region along at least a portion of the length.

Claim 36 (new). Apparatus according to claim 35 wherein the brightness converter comprises a core, a first cladding, and rare earth dopant, and is defined by a first end and a second end.

Claim 37 (new). Apparatus according to claim 36 wherein the brightness converter comprises a tapered region located between the first end and the second end, the apparatus further being defined by a cross-sectional area of the first end and a cross-sectional area of the second end, and further wherein the cross-sectional area of the first end is greater than the cross-sectional area of the second end, and the brightness converter is substantially rigid between the first end and the tapered region.

Claim 38 (new). Apparatus according to claim 35, and wherein the pump radiation is coupled from the pump source into the brightness converter using a coupling means.

1	Claim 39 (new). Apparatus according to claim 38 wherein the coupling means is
2	a lens.
3	
4	Claim 40 (new). Apparatus according to claim 36 wherein the apparatus
5	comprises a first reflector for reflecting optical radiation emerging from the first end.
6	
7	Claim 41 (new). Apparatus according to claim 40 and including a second
8	reflector.
9	
10	Claim 42 (new). Apparatus according to claim 35 wherein the pump source
11	comprises at least one laser diode, at least one laser diode bar, at least one laser
12	diode stack, or at least one laser diode mini-bar stack.
13	
14	Claim 43 (new). Apparatus according to claim 35 wherein the pump source
15	includes a solid-state laser, a gas laser, an arc lamp, or a flash lamp.
16	
17	Claim 44 (new). Apparatus according to claim 35 wherein the apparatus
18	comprises a plurality of the pump sources and a combining means for combining
19	pump radiation emitted by the pump sources.
20	
21	Claim 45 (new). Apparatus according to claim 44 wherein the combining means
22	comprises a beam splitter, a reflector, a polarisation beam combiner, a beam shaper,
23	a wavelength division multiplexer, or a plurality of optical fibres in optical contact
24	along at least a portion of their length.
- 1	

Apparatus according to claim 35 wherein the brightness

Claim 46 (new).

converter contains a plurality of cores.

1	Claim 47 (new).	Apparatus	according	to	claim	35	wherein	the	brightness
2	converter contains a	a single core	ı .						
3									
4	Claim 48 (new).	Apparatus	according	to	claim	35	wherein	the	brightness
5	converter is circular								
6									
7	Claim 49 (new).	Apparatus	according	to	claim	35	wherein	the	brightness
8	converter is non-circ	cular.							
9									
10	Claim 50 (new).	Apparatus	according	to	claim	35	wherein	the	brightness
1	converter comprises	s a rare-eart	h dopant.						
12									
13	Claim 51 (new).	Apparatus	according to	o cla	aim 50	whe	rein the ra	are e	arth dopant
	` ′								
۱4	is selected from								leodymium,
14		the grou	up compris	sing	Ytter	bium	ı, Erbiun	n, N	leodymium,
	is selected from	the grouulium, Sama	up compris arium, Holn	sing nium	Ytterl	bium	ı, Erbiun	n, N	leodymium,
15	is selected from Praseodymium, Th	the grouulium, Sama	up compris arium, Holn	sing nium	Ytterl	bium	ı, Erbiun	n, N	leodymium,
15	is selected from Praseodymium, The Ytterbium, or Neody	the grou ulium, Sama /mium codor	up compris arium, Holn ped with Ytt	sing nium erbii	Ytterl n, Dysp um.	bium rosiu	ı, Erbiun im, Erbiu	n, N m co	leodymium,
15 16 17	is selected from Praseodymium, The Ytterbium, or Neody	the grouulium, Sama mium codop Apparatus	up comprison arium, Holn bed with Ytto according	sing nium erbii	Ytterl n, Dysp um.	bium rosiu	ı, Erbiun im, Erbiu	n, N m co	leodymium,
15 16 17 18	is selected from Praseodymium, The Ytterbium, or Neody Claim 52 (new).	the grouulium, Sama mium codop Apparatus	up comprison arium, Holn bed with Ytto according	sing nium erbii	Ytterl n, Dysp um.	bium rosiu	ı, Erbiun im, Erbiu	n, N m co	leodymium,
15 16 17 18	is selected from Praseodymium, The Ytterbium, or Neody Claim 52 (new).	the grouulium, Sama mium codop Apparatus	up comprison comprison according cladding.	sing nium erbit to	Ytterl n, Dysp um. claim	bium rosiu 36	i, Erbiun im, Erbiu wherein	n, N m co	leodymium, doped with brightness
115 116 117 118 119 120 119	is selected from Praseodymium, The Ytterbium, or Neody Claim 52 (new). converter comprises	the grouulium, Sama mium codor Apparatus a second co	up comprison comprison arium, Holm bed with Ytt. according cladding.	sing nium erbii to	Ytterin, Dyspum. claim	bium rosiu 36	n, Erbiun im, Erbiu wherein wherein	n, N m co the	leodymium, doped with brightness
115 116 117 118 119 120	is selected from Praseodymium, The Ytterbium, or Neody Claim 52 (new). converter comprises Claim 53 (new).	the groundlium, Sama mium codor Apparatus a second of Apparatus with neodyr	up comprison arium, Holn bed with Ytt according according mium or ytte	sing nium erbio to to erbio	Ytterin, Dyspum. claim claim	bium rosiu 36	n, Erbiun im, Erbiu wherein wherein	n, N m co the	leodymium, doped with brightness
15 16 17 18 19 19 10 10 10 10 10 10	is selected from Praseodymium, The Ytterbium, or Neody Claim 52 (new). converter comprises Claim 53 (new). converter is doped	the groundlium, Sama mium codor Apparatus a second of Apparatus with neodyr	up comprison arium, Holn bed with Ytt according according mium or ytte	sing nium erbio to to erbio	Ytterin, Dyspum. claim claim	bium rosiu 36	n, Erbiun im, Erbiu wherein wherein	n, N m co the	leodymium, doped with brightness
15 16 17 18 19 19 19 19 19 19 19	is selected from Praseodymium, The Ytterbium, or Neody Claim 52 (new). converter comprises Claim 53 (new). converter is doped	the groundium, Sama ymium codor Apparatus a second of Apparatus with neodyr	up comprison arium, Holn bed with Ytt. according cladding. according mium or ytter-doped with	sing nium erbii to to erbii	Ytterin, Dyspum. claim claim um, and	osium rosiu 36 35	wherein waveguid	n, N m co the the	leodymium, doped with brightness

1	Claim 55 (new). Apparatus according to claim 35 wherein the brightness
2	converter is defined by a width, and wherein the width is in the range 0.1mm to
3	100mm.
4	
5	Claim 56 (new). Apparatus according to claim 55 wherein the width is in the
6	range 0.2mm to 25mm.
7	
8	Claim 57 (new). Apparatus according to claim 56 wherein the width is in the
9	range 5mm to 15mm.
10	
11	Claim 58 (new). Apparatus according to claim 35 wherein the brightness
12	converter is defined by a breadth, and wherein the breadth is in the range 0.1mm to
13	100mm.
14	
15	Claim 59 (new). Apparatus according to claim 58 wherein the breadth is in the
16	range 0.2mm to 25mm.
17	
18	Claim 60 (new). Apparatus according to claim 59 wherein the breadth is in the
19	range 2mm to 15mm.
20	
21	Claim 61 (new). Apparatus according to claim 1 wherein the brightness converter
22	is defined by a length, and wherein the length is in the range 1mm to 2000mm.
23	
24	Claim 62 (new). Apparatus according to claim 61 wherein the length is in the
25	range 10mm to 200mm.

1	Claim 63 (new).	Apparatus according to claim 62 wherein the length is in the
2	range 10mm to 50n	nm.
3		
4	Claim 64 (new).	Apparatus according to claim 35 wherein the brightness
5	converter is formed	from an optical fibre preform.
6		
7	Claim 65 (new).	Apparatus according to claim 64 wherein the preform is made
8	from silica, silicic, p	hosphate or phosphatic glass.
9		
10	Claim 66 (new).	Apparatus according to claim 64 wherein the preform defines
11	longitudinally exten	ded holes disposed therein.
12		
13	Claim 67 (new).	Apparatus according to claim 66 wherein the preform includes
14	stress rods.	
15 16	Claire 60 (navy)	Ammanatus assenting to alsies 25 and in the force of a large
17	Claim 68 (new).	Apparatus according to claim 35 and in the form of a laser, a Q-
18	frequency converte	r, a master oscillator power amplifier, or a laser that contains a
19	inequency converte	'
20		(End of amendments.)
21		
22		
23		
24		
25		